the expanded text "JAMES VAN BOXTEL" within the expanded anchor range **254'**. However, upon modification of the enclosure annotation, as illustrated in the third line **258**, an adjusted enclosure annotation **260** encircles the expanded text "JAMES VAN BOXTEL." In some embodiments, the enclosure annotation is expanded by moving a part **262** of the enclosure annotation **252** and adding a portions **264** of the path to retain continuity of the adjusted enclosure annotation **260** with regard to the expanded anchor range **254'**. The added portions **264** of the path of the adjusted enclosure annotation **260** may be added to the path of the annotation input for the original enclosure annotation **252**, thereby dynamically updating the annotation input with the modification to the document data.

[0092] Where modification to the portion of the text contracts the anchor range with the annotation, the modification may be to contract the path of the respective annotation input along the anchor range. That is, if the annotation is a strikethrough annotation that strikes through five words and the annotation has an anchor range including the five words, then a modification to remove three of the words within the anchor range prompts the process **230** to contract the path of the strikethrough annotation to only strikethrough the two remaining original words. Continuing this example, if the modification removes all five of the original words (thus causing the anchor range of the document to be null), then the modification to the annotation may be the removal of the entire strikethrough annotation. FIG. **18** illustrates an example of an underline annotation **310** for the anchor range **76** that is adjusted to a contracted underline annotation **310'** with the removal of the word "MAURIS" within the anchor range **76**.

[0093] In some embodiments, the modification to the portion of the document moves the anchor location. Where the modification moves the anchor location for an annotation with a callout or an arrow annotation, the process **230** may expand, contract, or rearrange the path between endpoints of the callout or arrow annotation. FIG. **19** illustrates an example of a callout **320** from an enclosure annotation **322** to a margin comment **324**. A modification to the text that moves the anchor location on the word "MASSA" to the next line may cause the process **230** to modify the callout, as shown by the modified callout **320'**. In some embodiments, the process **230** may modify the middle portion of the callout or arrow annotation to reduce coverage of text or images of the document data. In some embodiments, the process may move a cluster of one or more annotation inputs from a left margin to a right margin, or vice versa, in response to a modification of the document that moves the anchor location for the cluster.

[0094] FIGS. **20A-20D** illustrates an example of two annotations associated with text box objects of a document. FIG. **20A** illustrates a comment annotation **330** that is anchored in an associated location relative to the anchor location **78** on the left edge of a first text box **332**. The first text box **332** and a linked second text box **338** are objects located within a body **340** of text of the document. An enclosure annotation **336** is anchored to the text "CONVAL-LIS" within the first text box **332**. FIG. **20B** illustrates movement of the first text box **332** a first distance **334** to the right, which also moves the comment annotation **330** to be within the body **340**. Addition of the text "DOME" to the final line of the first text box **332** in FIG. **20B** pushes/wraps the text "CONVALLIS" to a second text box **338** that is

linked to the first text box **332**. Accordingly, the enclosure annotation **336** moves with the anchored text "CONVAL-LIS" to the second text box **338**. FIG. **20B** illustrates that the text of the body **340** of the document may wrap around the first text box **332** and the comment annotation **330**. In some embodiments, the text of the body **340** of the document may wrap around the first text box **332**, but not the comment annotation **330**, such that the comment annotation **330** is displayed over a portion of the text of the body **340** of the document as illustrated in FIG. **20C**. Moreover, in some embodiments, the comment annotation **330** may be associated with the first text box **332** and the anchor location **78**, but the comment annotation **330** is anchored to the margin outside the body of the text of the document, as illustrated in FIG. **20D**.

[0095] The specific embodiments described above have been shown by example, and it should be understood that these embodiments may be susceptible to various modifications and alternative forms. It should be further understood that the claims are not intended to be limited to the particular forms disclosed, but rather to cover all modifications, equivalents, and alternatives falling within the spirit and scope of this disclosure. For example, while the discussion herein described a function with a first search attribute and a second modal attribute, any number and type of attributes may be processed using the techniques provided herein.

What is claimed is:

1. A tangible, non-transitory, machine-readable medium, comprising machine-readable instructions that when executed by one or more processors, cause the one or more processors to:

group annotation inputs into one or more clusters;

associate the one or more clusters with document data, wherein the document data comprises one or more objects for display as an image on a display, each annotation input comprises a respective path that overlaps the image relative to the one or more objects, and each cluster of the one or more clusters is associated with an object of the one or more objects of the document data;

display annotations on the display with the image, wherein each displayed annotation corresponds to the respective path of the respective annotation input over the image;

receive input to modify one or more objects of the document data; and

adjust the display of the annotations based at least in part on the received inputs to modify the one or more objects of the document data.

2. The machine-readable medium of claim **1**, comprising machine-readable instructions that, when executed by the one or more processors to group the annotation input into one or more clusters, cause the one or more processors to:

determine a padding area around the respective path for each annotation input based on a function relating a padding distance and an elapsed time since a lift-off time of the respective annotation input; and

group a first set of annotation inputs with overlapping padding areas into a first cluster.

3. The machine-readable medium of claim **2**, comprising machine-readable instructions that, when executed by the one or more processors, cause the one or more processors to adjust the padding distance in response to a user input,